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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,235	03/28/2006	Ryoichi Omote	36856.1429	5315

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EXAMINER
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SUMMONS, BARBARA

ART UNIT	PAPER NUMBER
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2817

NOTIFICATION DATE	DELIVERY MODE
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12/01/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JKEATING@KBIPLAW.COM  
uspto@kbiplaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,235	<b>Applicant(s)</b> OMOTE, RYOICHI	
	<b>Examiner</b> BARBARA SUMMONS	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 8,9,11-14 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8, 9, 11-14 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***New Grounds of Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8, 9, 11-14 and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Taniguchi U.S. 2003/0214368 in view of Nakagawara et al. JP 2002-353768 and Yoshida et al. U.S. 2001/0013739 (each of record cited by Applicant) and Yuda et al. JP 11-017486.

The combination of Taniguchi/Nakagawara/Yoshida discloses the invention as discussed in paragraph 2 of the prior Office action for the same reasons given therein.

However, Taniguchi also does not disclose the newly added feature of claim 8 that the second inductance between a parallel arm resonator and a ground potential is "defined by a line embedded in the duplexer" (see e.g. the last 5 lines of claim 8).

Regarding new claim 25, note that Taniguchi discloses flip chip bonding as an alternative to wire bonding (see Figs. 7-8).

Yuda et al. discloses that it would have been a known art recognized alternative to replace a bond wire inductance between a parallel resonator and ground at least a part thereof with a line embedded in the device (see Figs. 1 and 4 vs. Figs. 1 and 5).

Yuda also discloses the well known desirability of such an inductance between a

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parallel resonator and ground in a SAW filter for adjusting the filter characteristics (see the abstract, lines 1-5 and the last 4 lines thereof).

Additionally, the Examiner Takes Official Notice and has cited a reference below as evidence that when using the alternative flip chip mounting rather than wire-bonding a SAW filter, it would have been extremely well known to form an inductance connected to the parallel resonators as an embedded line (see e.g. Taniguchi et al. JP 2002-141771 cited below as evidence).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the SAW duplexer of Taniguchi US '368 (Fig. 1) by either having replaced the wire bond to the parallel resonator at least partially with a line embedded in the duplexer or by having flip chip mounted the device and used a line embedded in the duplexer as the inductor connected to the parallel resonator, because such obvious modifications would have been merely art recognized alternative means of providing an inductance between a parallel resonator and ground as suggested by Yuda (Fig. 4 vs. Fig. 5), and wherein flip chip mounting would have been an art recognized alternative to wire bonding as suggested by Taniguchi US '368 (see Figs. 7-8) wherein one of ordinary skill in the art would have known when flip chip mounting rather than wire bonding to provide the inductance normally provided by the wires as a line embedded in the device (see other art of record as evidence), and wherein providing such an inductance at a specific value rather than just a generic wire bonding inductance would have been extremely well known in the art in order to provide the advantageous benefit of adjusting the filter characteristics as suggested by Yuda

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(see the abstract, lines 1-5 and the last 4 lines thereof) and as would have been known by one of ordinary skill (see also other art of record).

### ***Response to Arguments***

3. Applicant's arguments with respect to claim 8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Taniguchi et al. JP 2002-141771 is cited to show that one of ordinary skill in the art would have known to provide desirable inductances between parallel resonators and ground in a SAW filter via embedded lines when the SAW filter is flip chip mounted rather than wire bonded.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA SUMMONS whose telephone number is (571)272-1771. The examiner can normally be reached on M-Thu, M-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bob Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bs  
November 23, 2008

/Barbara Summons/  
Primary Examiner, Art Unit 2817